

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006080**Date Inspected:** 21-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Fabrication**Summary of Items Observed:**

CWI Inspectors Mr. Li Ming, Mr. Wu Ming Kai, Mr. Li Li

On this date CALTRANS OSM Quality Assurance (QA) Inspector Mr. Paul Dawson arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

**OBG Bay 3**

This QA Inspector performed random ultrasonic (UT) inspections of approximately 10 percent length of OBG Corner Assembly welds CA009-054, CA001-033/081/022/058, SEG019D-001, SEG013E-087/082, CA007-054/017/042, CA011-033/034, CA005-042-053, CA009-018, SEG019E-029. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel and the welds are listed on ZPMC Notification of Witness Inspection document 002036. The QA Inspector observed the welds that were ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

The QA Inspector observed several of the Corner Assembly welds have been identified as having four repairs. The QA Inspector asked ZPMC CWI Mr. Li Zhijang if ZPMC has processed critical weld repair documentation for the welds that had been repaired multiple times and Mr. Li Zhijang said critical weld repair documents have been submitted and the critical weld repair numbers are written on the yellow tags attached to each of the corner assemblies. See the photograph below that shows where the QA Inspector performed ultrasonic inspections of

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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Corner Assembly welds.

Tower Bay 12

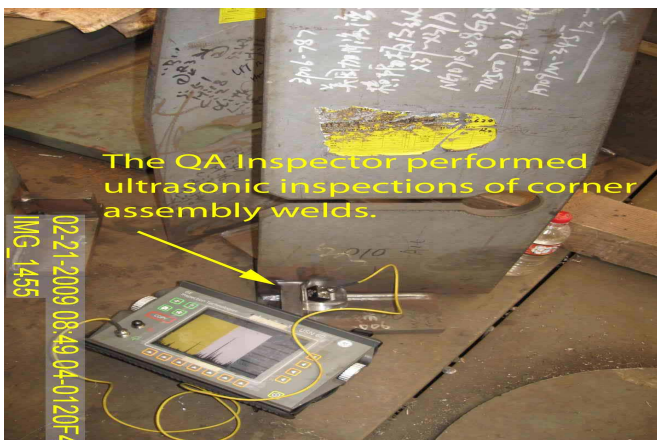
This QA Inspector performed random ultrasonic (UT) inspections of approximately 10 percent length of deck stiffener to deckplate weld DP615-001-017R1 and deck plate stiffener to closed rib diaphragm weld DP590-001-097R1. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that was ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

Tower Bay 10

The QA Inspector observed ZPMC welder Mr. Jiang Xiaohu stencil 066155 is the using flux cored welding process to make stiffener to skin plate groove weld WSD1-SA294F/G-96 and the QA Inspector observed ZPMC Quality Control personnel had recorded Mr. Jiang Xiaohu having a welding current of approximately 308 amps and 30.5 volts. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Han Lin stencil 062782 is the using flux cored welding process to make skin plate groove weld WSD1-SA294F/G-96 and the QA Inspector observed ZPMC Quality Control personnel had recorded Mr. Jiang Xiaohu having a welding current of approximately 322 amps and 32.0 volts. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Zhang Mingwu stencil 066283 is the using flux cored welding process to make stiffener to skin plate groove weld WSD1-SA294F/G-96 and the QA Inspector observed ZPMC Quality Control personnel had recorded Mr. Jiang Xiaohu having a welding current of approximately 316 amps and 31.8 volts. Items observed by the QA Inspector appear to comply with project specifications.



### Summary of Conversations:

See above.

### Comments

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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod phone: 134-8257-0045 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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